Recovery Plan Action Status

Plan Name: Hinckley Oak

Plan Status: Final Plan Date: 30-Sep-92

Lead Agency: USFWS
Lead Office: Austin Ecological Services Field Office
490-0057)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Hinckley oak (Quercus hinckleyi)	1	111	Protect sites within the Big Bend Ranch State Natural Area (BBRSNA)	Not Started			Texas Department of Parks and Wildlife	Work type not yet selected	Labor type not yet selected	
Hinckley oak (Quercus hinckleyi)	1	112	Complete a site evaluation and short-term management plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES cost estimates = 2K/year, TPWD cost estimates = 2K/year
Hinckley oak (Quercus hinckleyi)	2	113	Develop long-term management plans for BRRSNA sites	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Depends on study results of task 3. ES costs: FY1 = 5K, FY2&3 = 2.5K/year. FY1 = 5K, FY2&3 = 2.5K/year.
Hinckley oak (Quercus hinckleyi)	1	114	Educate Natural Area staff about the presence and importance of Hinckley Oak	Not Started			Texas Department of Parks and Wildlife	Work type not yet selected	Labor type not yet selected	After year 3 should be integrated into standard TPWD training & operations. Cost estimates: FY1 = 0.5K, FY2&3 = 0.25K/year
Hinckley oak (Quercus hinckleyi)	1	121	Establish protection for private land sites w/appropriate mechanisms	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	
Hinckley oak (Quercus hinckleyi)	1	122	Complete a site evaluation and establish short-term management plans for private land sites	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	

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Hinckley oak (Quercus hinckleyi)	2	123	Work with landowners to develop and implement long- term management plans	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Depends on study results of task 3.
Hinckley oak (Quercus hinckleyi)	1	131	Inform highway design personnel about the presence and fragility of Hinckley Oak	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, Texas Department of Transportation, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	After year 1 training and management, needs would be incorporated into standard DOT training and procedures. ES costs = 1K, DOT costs = 1K, TPWD costs = 0.25K.
Hinckley oak (Quercus hinckleyi)	1	132	Periodically contact DOT Area Engineer and Landscape Section	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Transportation, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs = 0.25K/year, DOT costs = 0.25K/year.
Hinckley oak (Quercus hinckleyi)	2	14	Enforce the ESA and State endangered plant laws	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, U.S. Fish and Wildlife Service, Law Enforcement Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs = 2K/year, LE costs = 1K/year, TPWD costs = 2K/year.
Hinckley oak (Quercus hinckleyi)	2	15	Monitor all populations	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 113, 123, 132, 16, 313, & 8. Will be useful to tasks 322 & 323. ES costs: FY1 = 5K, FY2&3 = 2.5K/year. TPWD costs: FY1 = 5K, FY2&3 = 2.5K/year.
Hinckley oak (Quercus hinckleyi)	2	16	Evaluate and revise management plans regularly	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs: FY1 = 0K, FY2&3 = 2K/year. TPWD costs: FY1 = 0K, FY2&3 = 2K/year.

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Hinckley oak (Quercus hinckleyi)	2	21	Establish a cultivated population and seed bank with maximum genetic diversity	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	
Hinckley oak (Quercus hinckleyi)	2	22	Establish a cultivated collection monitoring and management plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	
Hinckley oak (Quercus hinckleyi)	2	23	Coordinate cultivation program with research efforts, providing support & incorporating results of task 33	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	
Hinckley oak (Quercus hinckleyi)	2	3111	Study geologic & edaphic requirements	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 41, 42, 53, & 6. Site-specific study. ES costs: FY1 = 2K, FY2 = 0.5K. TPWD costs: FY1 = 0.25K, FY2 = 0.125K.
Hinckley oak (Quercus hinckleyi)	2	3112	Study hydrologic requirements	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 41, 42, 53, & 6. Site-specific study. ES costs: FY1 = 2K, FY2 = 0.5K. TPWD costs: FY1 = 0.25K, FY2 = 0.125K.
Hinckley oak (Quercus hinckleyi)	2	312	Study microclimate	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 41, 42, 53, & 6. ES costs: FY1 = 3K, FY2&3 = 2K/year. TPWD costs: FY1 = 0.75K, FY2&3 = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	2	313	Study community structure	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 113, 123, 132, 41 & 42. Cost assumes study coordinated with other work/visits to sites. ES costs: FY1 = 0.5K, FY2 = 0.25K. TPWD costs: FY1 = 0.5K, FY2 = 0.25K.

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Hinckley oak (Quercus hinckleyi)	1	3141	Study response to disturbance agricultural practices, and other land uses	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, Texas Department of Transportation, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 113, 123, 132, 16, 313, 41, 52, 53, and 6. Es costs: FY1&2 = 2K/year, FY3 = 2.5K. DOT costs: FY1 = 1K, FY2&3 = 0.5K/year. TPWD costs: FY1 = 2K, FY2 = 1.5K, FY3 = 1K.
Hinckley oak (Quercus hinckleyi)	1	3142	Study interactions with other species	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 113, 123, 132, 16, 313, 41, 52, 53, and 6. ES costs: FY1 = 4K, FY2&3 = 2.5K/year. TPWD costs: FY1 = 1K, FY2&3 = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	1	3211	Assess present demographics & needs	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to task 113, 123, 132, 15, 16, 53, and 6. ES costs = 4K/year. TPWD costs = 1K/year.
Hinckley oak (Quercus hinckleyi)	1	3212	Assess genetic viability & needs	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 113, 123, 132, 15, 16, 53, & 6. Ongoing section 6 studies. ES costs = 4K/year, TPWD costs = 1K/year.
Hinckley oak (Quercus hinckleyi)	1	3213	Assess threat of hybridization	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to task 113, 123, 132, 41, 53, & 6. Section 6 studies. ES costs = 4K/year, TPWD costs = 1K/year.
Hinckley oak (Quercus hinckleyi)	2	322	Characterize Phenology and most vulnerable stage(s)	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 113, 123, 132, 15, 16, 53, 6 & 8. ES costs: FY1 = 3K, FY2 = 2K, FY 3 = 1K. TPWD costs: FY1 = 1K, FY2&3 = 0.5K.

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Hinckley oak (Quercus hinckleyi)	1	3231	Determine types of reproduction and contribution to population	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to task 113, 123, 132, 15, 16, 51, 52, 6, and 8. ES costs = 2K/year, TPWD costs = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	1	3232	Investigate pollination biology including receptivity to other Quercus species	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to task 113, 123, 132, 21, 51, 52, 53, and 6. ES costs = 2K/year, TPWD costs = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	1	3233	Investigate seed production and dispersal	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to task 113, 123, 132, 22, 52, 53, and 6. ES costs = 1K/year, TPWD costs = 0.25K/year.
Hinckley oak (Quercus hinckleyi)	1	3234	Determine seedling recruitment	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to task 113, 123, 132, 15, 16, 52, 53, 6, and 8. ES costs = 1K/year, TPWD costs = 0.25K/year.
Hinckley oak (Quercus hinckleyi)	2	331	Study seed biology (viability, longevity, etc)	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 21, 52, 53, & 6. ES costs: FY1=2K, FY2&3=1K
Hinckley oak (Quercus hinckleyi)	2	332	Study germination requirements	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 21, 52, 53, & 6. ES costs: FY1=2K, FY2=1K
Hinckley oak (Quercus hinckleyi)	2	333	Study seedling biology	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 21, 52, 53, & 6. ES costs: 2K/year for FY1,2&3.
Hinckley oak (Quercus hinckleyi)	2	334	Study propagation techniques	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Necessary to tasks 21, 52, 53, & 6. May be needed for 113, 123, & 132. ES costs: 3K/year for FY1, 2, & 3.

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Hinckley oak (Quercus hinckleyi)	1	41	Search for existing populations	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, Texas Department of Agriculture, Soil Conservation Service, USFWS Regional Office 2, County Agricultural Extension Service	Work type not yet selected	Labor type not yet selected	SCS,TDA, COEX Liaison to Landowners. See paragraph 2 of task 41. ES costs: FY1 = 7K, FY2 = 6K, FY3 = 5K. TPWD costs = 2K/year. SCS costs for FY1 = 0.5K. TDA costs for FY1 = 0.5K. CoEx costs for FY1 = 0.5K.
Hinckley oak (Quercus hinckleyi)	2	42	Search for potential reintroduction sites	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs = 2K/year for FY1&2. TPWD costs = 0.5K/year for FY1&2.
Hinckley oak (Quercus hinckleyi)	1	51	Assess ability of present habitat to continue to support species and recovery potential	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs: FY1 = 5K, FY2&3 = 1K/year. TPWD costs: FY1 = 2K, FY2&3 = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	2	52	Examine potential reintroduction techniques	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Dependent on outcome of task 5.1 above.
Hinckley oak (Quercus hinckleyi)	2	53	Establish a small scale reintroduction pilot program if feasible	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Depending on results of previous studies & task 5.1. ES costs: FY1 = 4K, FY2&3 = 1.5K/year. TPWD costs: FY1 = 1K, FY2&3 = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	3	54	Reevaluate feasibility of reintroduction	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Dependant on pilot results.
Hinckley oak (Quercus hinckleyi)	3	6	Develop and implement reintroduction plan if feasible	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Depends on assessment of recovery potential. ES costs: FY1 = 8K, FY2&3 = 4.5K/year. TPWD costs: FY1 = 2K, FY2&3 = 0.5K/year.

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Hinckley oak (Quercus hinckleyi)	2	7	Develop public concern and support	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs: FY1 = 4K, FY2&3 = 2K/year. TWD costs: FY1 = 1K, FY2&3 = 0.5K/year.
Hinckley oak (Quercus hinckleyi)	3	8	Develop a post- recovery monitoring plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Texas Department of Parks and Wildlife, Texas Department of Transportation, USFWS Regional Office 2	Information	Contract, Internal Administrative, Internal Technical Assistance, Species Expert	Dependent on achieving recovery levels.